

Vertical or horizontal visual analogue scales

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SUMMARY Vertical and horizontal visual analogue scales have been compared in the measurement of pain. There was a good correlation between the 2 scales, but the scores from horizontal scales tended to be slightly lower than those from vertical scales.

Visual analogue scales have been proved to be satisfactory in the measurement of pain (Huskisson, 1974). The addition of descriptive terms produces a graphic rating scale which may have some advantages. However, the distribution of results and therefore the performance of a graphic rating scale may be greatly influenced by changing it from the horizontal to the vertical position (Scott and Huskisson, 1976). In this paper we describe an experiment designed to find if any difference exists in the performance of a visual analogue scale when used horizontally or vertically.

Methods

One hundred outpatients attending a rheumatology clinic with painful conditions were asked to complete 2 visual analogue scales, a vertical one and a horizontal one. The order in which they were given to the patients was randomised, and the first scale was removed before the second was presented. The scale was divided into 20 parts at the end of the experiment.

Results

There was no significant difference between the distribution of scores measured on the vertical and horizontal visual analogue scales ($\chi^2 = 2.92$, $P > 0.1$), and there was an extremely high correlation between the two scales ($r = 0.99$, $P < 0.001$).

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Table 1 Mean results of measurements of pain in 100 patients, vertical and horizontal visual analogue scales being used in random order. Standard errors are also shown. The difference was of borderline statistical significance ($t = 1.83$, $0.1 > P > 0.05$)

	Vertical	Horizontal
Mean	11.05	10.85
SE \pm	0.65	0.63

However, the scores on the horizontal scale tended to be slightly lower than on the vertical scale (Table 1).

Discussion

Both vertical and horizontal visual analogue scales have proved to be satisfactory. However, the scores from the horizontal scales tended to be slightly lower than the vertical ones. It is therefore essential that the scale should remain identical during any one study. A good correlation between vertical and horizontal scales was also reported by Downie *et al.* (1978).

References

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